

**AMENDMENTS TO THE CLAIMS**

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

**Listing of the Claims**

1. (Currently Amended) A computer readable medium having a data structure for managing reproduction of video data having multiple playback paths ~~for each title~~, comprising:

a data area storing ~~at least one~~ a plurality of clip files of the video data having multiple playback paths ~~for each title~~, ~~the~~ each clip file being associated with one of the playback paths;

a management area storing management information for managing reproduction of the video data having multiple playback paths ~~for each title~~, the management information including ~~an~~ a plurality of information files, ~~associated with each clip file~~ being associated with one of the information files, ~~each~~ the one information file providing at least one map, the map identifying ~~including~~ at least one entry point for the associated clip file, the map mapping a presentation time stamp to a corresponding ~~source packet~~ address ~~of~~ in the associated clip file; and

a playlist directory area storing at least one playlist file including at least one playitem, the plurality of clip files being associated with the playlist, the playitem identifying at least one playing interval ~~of the~~ in the plurality of clip

files, ~~the playitem including identification information indentifying the information file associated with the clip file,~~ the playlist file storing connection information between a previous playitem and a current playitem, the playlist file including path number information identifying which playback paths are associated with the playlist ~~indicating one of the multiple playback paths associated with the clip file.~~

2. (Previously Presented) The computer readable medium of claim 1, wherein a group of playlist files is associated with each playback path.

3-5. (Canceled)

6. (Previously Presented) The computer readable medium of claim 1, further comprising:

navigation information in a navigation area, the navigation information managing the playlist file to be reproduced.

7. (Previously Presented) The computer readable medium of claim 6, wherein the different playback paths are related to different stories.

8. (Canceled)

9. (Currently Amended) The computer readable medium of claim 1, wherein

~~the data area stores a plurality of clip files of the video data having multiple playback paths, and~~

the video data for each playback path is stored in a different clip file.

10-15. (Cancelled)

16. (Currently Amended) A method of video data having multiple playback paths ~~for each title~~ from a recording medium, comprising:

receiving user input selecting one of playback paths;

reproducing at least one playlist file associated with the selected playback path ~~based on navigation information~~ recorded on the recording medium, the playlist file including at least one playitem, the playitem identifying at least one playing interval ~~of in~~ a clip file, the clip file being associated with the playlist ~~the playitem including identification information indentifying the information file associated with the clip file~~, the playlist file storing connection information between a previous playitem and a current playitem, the playlist file including path number information identifying which playback paths are associated with the playlist ~~indicating one of the multiple playback paths associated with the clip file~~;

reproducing ~~at least~~ the clip file of the video data having multiple playback paths from the recording medium; and

reproducing management information for managing reproduction of the video data having multiple playback paths from a management area of the

recording medium, the management information including ~~an~~ a plurality of information files, ~~associated with each the clip file~~ being associated with one of the information files, ~~each the~~ information file providing at least one map, the map identifying ~~including~~ at least one entry point for the associated clip file, the map mapping a presentation time stamp to a corresponding ~~source packet~~ address ~~of~~ in the associated clip file, ~~the playitem including the identification information for the clip file.~~

17. (Currently Amended) The method of claim 16, wherein the reproducing step reproduces a group of playlist files based on ~~the~~ navigation information for managing the playlist files.

18. (Currently Amended) A method of recording a data structure for managing reproduction of at least video data on a recording medium, comprising:

recording a playlist directory including at least one playlist file in a playlist directory area of the recording medium, the playlist file for identifying a portion of video data having multiple playback paths ~~for each title~~, the playlist file including at least one playitem, the playitem identifying at least one playing interval ~~of the~~ in a clip file, the clip file being associated with the playlist, the playlist file storing connection information between a previous playitem and a current playitem, the playlist file including path number information identifying which playback paths are associated with the playlist ~~indicating one~~

~~of the multiple playback paths associated with the clip file;~~

recording ~~at least one~~ the clip file of the at least video data in a data area of the recording medium, the clip being associated with one of the playback paths; and

recording management information for managing reproduction of the at least video data in a management area of the recording medium, the management information including ~~an~~ a plurality of information files, ~~associated with each~~ the clip file being associated with one of the information files, each the information file providing ~~[[a]]~~ the map identifying ~~including~~ at least one entry point for the associated clip file, the map mapping a presentation time stamp to a corresponding ~~source packet~~ address of in the associated clip file, ~~the playitem including identification information identifying the information file associated with the clip file.~~

19. (Cancelled)

20. (Currently Amended) An apparatus for recording a data structure for managing reproduction of at least video data having multiple playback paths ~~for each title~~, comprising:

an optical pickup configured to record data on a recording medium; and

a controller, operably coupled to the optical pickup, configured to control the optical pickup to record at least one clip file of the encoded video data in a data area on the recording medium, the clip file being associated with one of

the playback paths, the controller configured to control the optical pickup to record ~~a playlist directory including a plurality of~~ at least one playlist file[[s]], ~~the playlist file each~~ including at least one playitem in a playlist directory area of the recording medium, each playlist file for identifying a portion of the video data, the playitem identifying at least one playing interval ~~of~~ in the clip file, the playlist file storing connection information between a previous playitem and a current playitem, the playlist file including path number information identifying which playback paths are associated with the playlist ~~indicating one of the multiple playback paths associated with the clip file, the clip file being associated with the playlist,~~ the controller configured to control the optical pickup to record management information for managing reproduction of the encoded video data in a management area of the recording medium, the management information including ~~an~~ a plurality of information files, ~~associated with each the clip file being associated with one of the information files, each the~~ information file providing [[a]] the map identifying ~~including~~ at least one entry point for the associated clip file, the map mapping a presentation time stamp to a corresponding ~~source packet~~ address ~~of~~ in the associated clip file, ~~the playitem including identification information indentifying the information file associated with the clip file.~~

21. (Currently Amended) An apparatus for reproducing a data structure for managing reproduction of at least video data having multiple playback paths ~~for each title~~, comprising:

an optical pickup configured to reproduce data recorded on a recording medium; and

a controller, operably coupled to the optical pickup, configured to control the optical pickup to reproduce at least one playlist file in a playlist directory area of the recording medium, the playlist file for identifying a portion of the video data, the playlist file including at least one playitem, the playitem identifying at least one playing interval ~~of~~ in a clip file, the playlist file storing connection information between a previous playitem and a current playitem, the playlist file including path number information identifying which playback paths are associated with the playlist ~~indicating one of the multiple playback paths associated with the clip file~~, the clip file being associated with the playlist,

the controller configured to control the optical pickup to reproduce at least the clip file of the at least video data from a data area of the recording medium, the clip file being associated with one of the playback paths,

the controller configured to control the optical pickup to reproduce management information for managing reproduction of the at least video data from a management area of the recording medium, the management information including ~~an~~ a plurality of information files, ~~associated with each the clip file being associated with one of the information files~~, each information file providing at least one map, the map identifying ~~including~~ at least one entry point for the associated clip file, the map mapping a presentation time stamp to a corresponding ~~source packet~~ address ~~of~~ in the associated clip file, ~~the~~

~~playitem including identification information indentifying the information file associated with the clip file.~~

22. (Cancelled)

23. (Previously Presented) The apparatus of claim 20, wherein a group of playlist files is associated with each playback path.

24. (Previously Presented) The apparatus of claim 23, wherein the navigation information is stored in a navigation area, the navigation information for managing the playlist file.

25. (Previously Presented) The apparatus of claim 21, wherein a group of playlist files is associated with each playback path.

26. (Previously Presented) The apparatus of claim 25, wherein the navigation information is stored in a navigation area, the navigation information for managing the playlist file.

27-28. (Cancelled)

29. (Previously Presented) The method of claim 16, further comprising:  
reproducing navigation information stored in a navigation area, the



navigation information for managing the playlist file.

30. (Previously Presented) The method of claim 29, wherein the reproducing at least one playlist file reproduces a group of playlist files based on the navigation information.

31. (Cancelled)

32. (Previously Presented) The method of claim 18, further comprising:  
recording navigation information for managing the playlist file.

33. (Previously Presented) The method of claim 32, wherein the recording at least one playlist file records a group of playlist files based on the navigation information.

34-36. (Cancelled)

37. (Previously Presented) The computer readable medium of claim 1, wherein the at least one clip file is linked to more than one of the plurality of playlist files.

38-43. (Cancelled)

44. (New) The computer readable medium of claim 1, wherein the clip file

includes source packets, the source packets including a header and a transport packet, the transport packet including a packet identifier (PID), the source packet including a source packet number indicating the address in the clip file.